



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B75/P1
 UNIQUE ID NUMBER: 12GE156
 COMBUSTOR: TAPS
 ENGINE TYPE: TF

BYPASS RATIO: 8.8
 PRESSURE RATIO (π_{00}): 46.5
 RATED THRUST (F_{00}) (kN): 345.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.8	22.5	54.0	9.8
AS % OF ORIGINAL LIMIT	4.0	19.0	40.6	58.1
AS % OF CAEP/2 LIMIT (NO _x)			50.8	
AS % OF CAEP/4 LIMIT (NO _x)			54.0	
AS % OF CAEP/6 LIMIT (NO _x)			58.8	
AS % OF CAEP/8 LIMIT (NO _x)			65.0	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.753	0.03	0.17	47.53	0.0
CLIMB OUT	85	2.2	2.234	0.02	0.19	24.34	0.0
APPROACH	30	4.0	0.711	0.05	2.03	10.42	6.8
IDLE	7	26.0	0.227	0.43	16.63	4.64	0.1
LTO TOTAL FUEL (kg) or EMISSIONS (g)			936	170	6318	16093	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.5	18.3	46.6	7.6
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.0	0.3	0.5	2.1
RANGE (D _p /F ₀₀ in g/kN, or SN)				0.47-0.52	17.98-18.66	46.11-47	5.26-8.96

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT All POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT All POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.4-98.6
TEMPERATURE (K)	280.5-299
ABS HUMIDITY (kg/kg)	0.00345-0.00716

FUEL

SPEC	Jet A
H/C	1.89
AROM (%)	15.3

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: General Electric Company
 TEST LOCATION: PTO, Ohio
 TEST DATES: 29/09/2009-03/10/2009

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

REMARKS

1. Ref. GE REPORT R2010AE595
2. Engine S/N 956-108/2
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)